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May 26, 2011

Mr. Jim Baumann
Special Assistant to Bureau Director
Bureau of Watershed Management
Wisconsin Department of Natural Resources
101 S. Webster Street, Box 7921
Madison, WI 53707-7921

Ms. Jean Greensley
U.S. Environmental Protection Agency
Remediation and Reuse Branch
Land and Chemicals Division
77 W. Jackson Boulevard
Chicago, IL 60604-3511

Re: Proposed Overbank Removal Boundaries and PRV Sample Locations
Operable Unit 3, Reach J
Hayton Area Remediation Project

Dear Mr. Baumann and Ms. Greensley:

Enclosed for your approval are figures and tables showing revised overbank removal boundaries in Reach J of the Hayton Area Remediation Project, Operable Unit 3 (OU3). Electronic copies of this submittal are also being provided via email to James.Baumann@Wisconsin.gov and Greensley.Jean@epamail.epa.gov.

Figure 1 shows sample results and revised removal boundaries in Reach J. Table 1 lists the additional characterization samples were collected and analyzed in 2011. Table 2 provides the rationale for the boundaries of each removal zone of Reach J.

Also enclosed for your approval is a list of proposed post-remedial verification (PRV) samples in Reach J. The PRV samples are listed on Table 3, and their locations are shown on Figure 2.

For your reference, I have also enclosed a copy of the Reach J historic sample results presented in the 2006 *Lower OU2 & OU3 Technical Memorandum*.

We would appreciate your comments and approval for Reach J by Wednesday, June 8, 2011.

Please contact me at (312) 578-0870, extension 8486, with any questions.

Sincerely,
TRC

Christopher D. Harvey, PE
Program Manager

Enclosures: *Figure 1 - Sample Results and Excavation Boundaries, Reach J*
Figure 2 - Proposed Post-Remedial Verification Sampes, Reach J
Table 1- Characterization Sampling Results 2011, Reach J
Table 2 - Rationale for Removal Boundaries, Reach J
Table 3 - Proposed Post-Remedial Verification Samples, Reach J
Figure - Reach J (from Lower OU2 & OU3 Technical Memorandum, 2006)

Table 1. Characterization Sampling Results 2011
Reach J
Hayton Area Remediation Project

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Sample Name	Total PCBs (mg/kg)
RJ 001L 0-6"	11.4
RJ 002L 0-6"	2.19
DUP 81	1.13
RJ 003L 0-6"	15.1
RJ 004L 0-6"	0.0555
RJ 005L 0-6"	11.3
RJ 006L 0-6"	8.27
RJ 007L 0-6"	7.45
RJ 008L 0-6"	26.5
RJ 009L 0-6"	7.19
RJ 010L 0-6"	1.69
RJ 011L 0-6"	4.4
RJ 011L 12-21"	0.0939
DUP 82	0.382
RJ 011L 6-12"	2.82
RJ 012L 0-6"	3.42
RJ 013L 0-6"	1.5
RJ 014L 0-6"	3.04
RJ 015L 0-6"	4.4
RJ 016L 0-6"	5.75
RJ 017L 0-6"	5.28
RJ 018L 0-6"	0.12
RJ 019L 0-6"	<0.03
RJ 020L 0-6"	2.22
RJ 021L 0-6"	1.21
RJ B501R 0-6"	8.62
RJ B501R 6-12"	21.6
RJ B502R 0-6"	7.37
RJ B502R 6-12"	20
RJ B503R 0-6"	4.05
RJ B504R 0-6"	20.9
RJ B505R 0-6"	20.1
RJ 506R 0-6"	7.63
RJ 507R 0-6"	21.3
RJ 508R 0-6"	8.37
RJ 509R 6-12"	0.653

Sample Name	Total PCBs (mg/kg)
RJ 510R 0-6"	8.61
RJ 510R 6-12"	15.7
RJ 511R 0-6"	10.5
RJ 511R 6-12"	0.286
RJ B512R 0-6"	4.58
RJ B513R 0-6"	9.05
RJ B513R 6-12"	9.62
RJ B514R 0-6"	10.7
RJ B514R 6-12"	3.82
RJ 515R 0-6"	10
RJ 516R 0-6"	3.16
RJ 517R 6-12"	5.22
RJ B517R 12-18"	1.71
RJ B517R 18-24"	0.0872
RJ 518R 6-12"	6.24
RJ B518R 12-18"	0.979
RJ B518R 18-24"	0.795
DUP 84	3.66
RJ B519R 24-30"	0.103
RJ B520R 6-12"	29.9
RJ B521R 6-12"	3.4
RJ B522R 6-12"	8.33
RJ 523R 0-6"	3.73
RJ B524R 0-6"	3.78
RJ 525R 0-6"	4.06
RJ 525R 6-12"	5.57
RJ 526R 0-6"	3.6
RJ 527R 0-6"	5.56
RJ 527R 6-12"	4.3
RJ 528R 0-6"	1.71
RJ 529R 0-6"	2.96
RJ 530R 6-12"	18
RJ B531R 0-6"	4.14
RJ B531R 6-12"	10.1
DUP 88	12.4
RJ B532R 0-6"	5.08

Table 1. Characterization Sampling Results 2011
Reach J
Hayton Area Remediation Project

5/26/2011

Sample Name	Total PCBs (mg/kg)
RJ B532R 6-12"	14.3
RJ B533R 0-6"	6.2
RJ 534R 0-6"	8.14
RJ 535R 0-6"	15.9
RJ 536R 0-6"	3.6
RJ 537R 0-6"	8.5
RJ 537R 6-12"	4.41
RJ 538R 0-6"	1.85
RJ 538R 6-12"	2.79
RJ 539R 0-6"	2.68
RJ 540R 6-12"	6.71
DUP 91	9.77
RJ 541R 0-6"	2.71
RJ 542R 6-12"	2.44
RJ 543R 6-12"	1.62
RJ 544R 6-12"	7.63
RJ 545R 6-12"	4.24
RJ 546R 0-6"	1.81
RJ 546R 6-12"	1.33
RJ 547R 0-6"	8.4
RJ 548R 0-6"	6.57
RJ 549R 6-12"	2.18
RJ 550R 0-6"	7.05
RJ 551R 0-6"	16
RJ 552R 0-6"	13.5
RJ 553R 6-12"	4.5
RJ 554R 0-6	2.21
RJ 554R 0-6"	3.1
RJ 555R 0-6	4.9
RJ 555R 0-6"	2.86
RJ 556R 0-6	0.724
RJ 557R 0-6	4.36
RJ 558R 0-6	3.55

Table 2. Rationale for Removal Boundaries
Reach J
Hayton Area Remediation Project

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Removal Zone ID	Rationale
J101	• Boundary with I111 established by the polygon lines between 26IL, 1JL and 25IL, with reference to samples RJ-233+00-S20 6-12" = 2 mg/kg and I106 VW-7P 6-12" = 4.71 mg/kg. • Boundary with J102 established by sample RJ-233+00-S20 6-12" = 2 mg/kg. • Upland and downstream boundaries established by samples RJ 013L 0-6" = 1.5 mg/kg; RJ 002L 0-6" = 2.19 mg/kg; RJ 015L 0-6" = 4.4 mg/kg; RI-231+30-S80 6-12" = 0.13 mg/kg; and RJ 014L 0-6" = 3.04 mg/kg. • Floor established by samples RJ-233+00-S20 6-12" = 2 mg/kg; RJ-233+00-S60 6-12" = 0.41 mg/kg; RJ-233+00-S80 6-12" = 0.22 mg/kg; RJ-233+00-S100 6-12" = 0.56 mg/kg; and I106 VW-7P 6-12" = 4.71 mg/kg.
J102	• Boundary with J102 established by sample RJ-233+00-S20 6-12" = 2 mg/kg. • Floor established by sample RJ-233+00-S10 12-27" = 0.97 mg/kg.
J103	• Upstream boundary established by the polygon line between 3JL and 1JL, with reference to samples RJ-234+50-S10 0-6" = 1.2 mg/kg; and RJ 004L 0-6" = 0.0555 mg/kg. • Upland boundary established by sample RJ-234+70-S70 0-6" = 0.66 mg/kg; and the polygon line boundary between 4JLa and 3JL, with reference to RJ-234+50-S10 0-6" = 1.2 mg/kg. • Downstream boundary established by sample RJ 021L 0-6" = 1.21 mg/kg; and the polygon line between 4JLa and 6JLb, with reference to sample RJ-235+60-S50 0-6" = 0.57 mg/kg. • Floor established by sample RJ-234+70-S40 6-12" = 1.6 mg/kg.
J104	• Upland boundary with J105 established by the polygon line between 5JL and 6JLa, with reference to samples RJ-235+60-S10 0-6" = 21 mg/kg; RJ-235+60-S10 6-12" = 94 mg/kg; RJ-235+60-S30 0-6" = 63 mg/kg; and RJ-235+60-S30 6-12" = 28 mg/kg. • Floor established by sample RJ-235+80-S10 12-24" = 0.4 mg/kg.
J105	• Upland boundary established by sample RJ-235+60-S50 0-6" = 0.57 mg/kg. • Northern boundary with J104 established by the polygon line between 5JL and 6JLa, with reference to samples RJ-235+60-S10 0-6" = 21 mg/kg; RJ-235+60-S10 6-12" = 94 mg/kg; RJ-235+60-S30 0-6" = 63 mg/kg; and RJ-235+60-S30 6-12" = 28 mg/kg. • Floor established by sample RJ-235+60-S30 12-21" = 0.44 mg/kg.
J106	• Upstream boundary established by sample RJ 018L 0-6" = 0.12 mg/kg. • Upland boundary established by the polygon line between 12JL and 9JL with reference to sample RJ 019L 0-6" = <0.03 mg/kg; sample RJ-241+20-S40 0-6" = 1.9 mg/kg; and the polygon line between 9JL and 10JL, with reference to sample RJ 018L 0-6" = 0.12 mg/kg. • Downstream boundary established by sample RJ 019L 0-6" = <0.03 mg/kg. • Floor established by samples RJ-240+00-W20 6-12" = 0.7 mg/kg; and RJ-241+20-S10 6-12" = 2 mg/kg.

Table 2. Rationale for Removal Boundaries
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Removal Zone ID	Rationale
J107	• Boundary with J108 established by the polygon line between 18JL and 16JL, with reference to samples RJ-246+20-S50 6-12" = 3.8 mg/kg and RJ-246+20-S50 12-24" = 0.084 mg/kg. • Floor established by sample RJ-246+20-S10 21-27" = <0.037 mg/kg.
J108	• Upstream boundary established by sample RJ 020L 0-6" = 2.22 mg/kg. • Downstream boundary established by sample RJ 010L 0-6" = 1.69 mg/kg. • Eastern boundary with J107 established by the polygon line between 18JL and 16JL, with reference to samples RJ-246+20-S50 6-12" = 3.8 mg/kg and RJ-246+20-S50 12-24" = 0.084 mg/kg. • Upland boundary established by the polygon line between 18JL and 17JL, with reference to sample RJ-245+50-W75 0-6" = 0.61 mg/kg. • Floor established by samples RJ-246+20-S50 6-12" = 3.8 mg/kg; and RJ-246-20+80 6-12" = 0.077 mg/kg.
J109	• Upstream boundary established by samples RJ 011L 0-6" = 4.4 mg/kg; RJ 011L 6-12" = 2.82 mg/kg; RJ 011L 12-21" = 0.0939 mg/kg. • Upland boundary established by the polygon line between 19JL and 20JL, with reference to sample RJ-249+40-S50 6-12" = 0.21 mg/kg; and RJ-249+40-S50 12-15" = 3.4 mg/kg. • Downstream boundary established by the polygon line between 19JL and 1KL, with reference to sample RK-251+10-S20 12-18" = 3 mg/kg. • Floor established by sample RJ-249+00-W10 21-24" = 0.037 mg/kg.
J110	• Boundary with J109 established by the polygon line between 19JL and 20JL, with reference to sample RJ-249+40-S50 6-12" = 0.21 mg/kg; and RJ-249+40-S50 12-15" = 3.4 mg/kg. • Upstream boundary established by RJ 011L 0-6" = 4.4 mg/kg. • Upland boundary established by sample RJ 012L 0-6" = 3.42 mg/kg. • Downstream boundary with K101 established by the polygon line between 20JL and 2KL, with reference to samples RJ-249+40-S50 6-12" = 0.21 mg/kg; RJ-249+40-S80 6-12" = 3.3 mg/kg; and RJ-249+40-S100 6-12" = 4.9 mg/kg. • Floor established by samples RJ-249+40-S50 6-12" = 0.21 mg/kg; RJ-249+40-S80 6-12" = 3.3 mg/kg; and RJ-249+40-S100 6-12" = 4.9 mg/kg.
J201	• Upstream boundary established by the polygon line between 1JR and 18IRa, with reference to sample RJ B503R 0-6" = 6.2 mg/kg • Upland TSCA boundary with J201b established by sample RJ-233+00-N10 0-6" = 29 mg/kg. • Upland TSCA boundary with J201a established by sample RJ B501R 6-12" = 21.6 mg/kg. • Downstream TSCA boundary with J202 established by the polygon line between 3JR and 2JR, with reference to sample RJ-234+40-N10 0-6" = 21 mg/kg. • Floor established by sample RJ-234+40-N10 12-27" = 3.7 mg/kg.

Table 2. Rationale for Removal Boundaries
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Removal Zone ID	Rationale
J201a	• Upland boundary with J203 established by sample RJ-233+40-N40 6-12" = 2.1 mg/kg. • Southern TSCA boundary with J201 established by samples RJ B501R 0-6" = 8.62 mg/kg; and RJ B501R 6-12" = 21.6 mg/kg. • Floor established by sample RJ-234+40-N10 12-27" = 3.7 mg/kg.
J201b	• Southern TSCA boundary established by sample RJ-233+00-N10 0-6" = 29 mg/kg. • Upland boundary established samples RI-233+00-N30 6-12" = 1.6 mg/kg; and by the polygon line between 1JR and 2JR, with reference to sample RJ-234+40-N60 6-12" = 0.88 mg/kg. • Floor established by sample RJ-233+00-N10 12-18" = 2.7 mg/kg.
J202	• Eastern 6-12" boundary with J203 established by the polygon lines between 2JR and 4JR, with reference to sample RJ-234+40-N60 6-12" = 0.88 mg/kg. • Upland TSCA boundary established by the line created by samples RJ B502R 0-6" = 7.37 mg/kg and RJ B502R 6-12" = 20 mg/kg; and RJ B504 0-6" = 20.9 mg/kg. • Downstream TSCA boundary with J204a established by samples RJ B531R 0-6" = 4.14 mg/kg; and RJ B531R 6-12" = 10.1 mg/kg. • Southern TSCA boundary with J201 established by the polygon line between 3JR and 2JR, with reference to sample RJ-234+40-N10 0-6" = 21 mg/kg. • Floor established by sample RJ-235+40-N10 12-24" = 0.81 mg/kg.
J203	• Upstream boundary established by sample RJ B503R 0-6" = 4.05 mg/kg. • Southern boundary with J201a established by sample RJ-233+40-N40 6-12" = 2.1 mg/kg. • Southern boundary with J201b established by samples RI-233+00-N30 6-12" = 1.6 mg/kg; and by the polygon line between 1JR and 2JR, with reference to sample RJ-234+40-N60 6-12" = 0.88 mg/kg. • Upland TSCA boundary established by sample RJ B504R 0-6" = 20.9 mg/kg. • Downstream boundary established by the polygon lines between 2JR and 4JR, with reference to sample RJ-234+40-N60 6-12" = 0.88 mg/kg. • Floor established by samples RJ-234+40-N60 6-12" = 0.88 mg/kg; and RI-233+00-N30 0-6" = 1.6 mg/kg.
J205a	• Upland TSCA boundary established by RJ B505R 0-6" = 20.1 mg/kg. • Upstream boundary with J205b established by sample RJ-236+50-N80 6-12" = 2.5 mg/kg. • Downstream TSCA boundary established by the polygon line between 5JR and 4JR, with reference to the sample RJ-236+50-N30 0-6" = 25 mg/kg. • Floor established by samples RJ-236+70-N60 6-12" = 1.8 mg/kg; and RJ-236+50-N60 6-12" = 0.96 mg/kg.

Table 2. Rationale for Removal Boundaries
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Hayton Area Remediation Project

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Removal Zone ID	Rationale
J205b	• Upstream TSCA boundary with J204a established by sample RJ B532R 0-6" = 5.08 mg/kg. • Upland TSCA boundary established by the contour created by samples RJ B502R 0-6" = 7.37 mg/kg; and RJ B505R 0-6" = 20.1 mg/kg. • Downstream boundary with J205a established by sample RJ-236+50-N80 6-12" = 2.5 mg/kg. • Floor established by sample RJ-236+50-N80 12-24" = 0.59 mg/kg; and RJ-235+40-N10 12-24" = 0.81 mg/kg.
J204	• Upland boundary established by samples I207 VW-5F 0-6" = 4.26 mg/kg; RJ 556R 0-6" = 0.724 mg/kg; RJ 557R 0-6" = 4.36 mg/kg; RJ 558R 0-6" 3.55 mg/kg; RJ-238+00-N25 0-6" = 2.4 mg/kg; and the polygon line between 7JR and 6JR, with reference to sample RJ-238+00-N25 0-6" = 2.4 mg/kg. • TSCA boundaries with J202, J203 and J205a established by samples RJ B544R 0-6" = 6.2 mg/kg; RJ B504R 0-6" = 20.9 mg/kg; RJ B502R 0-6" = 7.37 mg/kg; RJ B502R 6-12" = 20 mg/kg; and RJ B505R 0-6" = 20.1 mg/kg. • Boundary with J204a established by samples RJ 563R 6-12" = 4.5 mg/kg; and RJ 549R 6-12" = 2.18 mg/kg. • Boundary with J205 established by the polygon lines between 4JR and 7JR, with reference to sample RJ 509R 6-12" = 0.653 mg/kg. • Boundary with J206 established by the polygon line between 5JR and 6JR, with reference to sample RJ-238+00-N10 6-12" = 3.2 mg/kg. • Downstream boundary established by sample RJ 536R 0-6" = 3.6 mg/kg. • Floor established by samples RJ 549R 6-12" = 2.18 mg/kg; RJ 553R 6-12" = 4.5 mg/kg; RJ 509R 6-12" = 0.653 mg/kg; and RJ-238+00-N10 6-12' = 3.2 mg/kg.
J204a	• Upland boundary established by samples RJ 563R 6-12" = 4.5 mg/kg; and RJ 549R 6-12" = 2.18 mg/kg. • TSCA boundary with J202 established by samples RJ B531R 0-6" = 4.14 mg/kg; RJ B531R 6-12" = 10.1 mg/kg; and the line created by samples RJ 502R 0-6" = 7.37 mg/kg; RJ B502R 6-12" = 20 mg/kg; and RJ B504R 0-6" = 20.9 mg/kg. • TSCA boundary with J205b established by samples RJ B532R 6-12" = 14.3 mg/kg; RJ 502R 0-6" = 7.37 mg/kg; and the contour created by samples RJ 502R 0-6" = 7.37 mg/kg; RJ B502R 6-12" = 20 mg/kg; and RJ B505R 0-6" = 20.1 mg/kg. • Floor established by samples RJ-235+40-N10 12-24" = 0.81 mg/kg; and RJ-236+50-N80 12-24" = 0.59 mg/kg.
J205	• Upstream TSCA boundary established by the polygon line between 5JR and 4JR, with reference to the sample RJ-236+50-N30 0-6" = 25 mg/kg. • Upland 6-12" boundary established by the polygon lines between 4JR and 7JR, with reference to sample RJ 509R 6-12" = 0.653 mg/kg. • Downstream 12-24" boundary and floor established by sample RJ-236+50-N30 12-24" = 0.65 mg/kg.

Table 2. Rationale for Removal Boundaries
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Removal Zone ID	Rationale
J206	• Upstream 6-24" boundary established by sample RJ-236+50-N30 12-24" = 0.65 mg/kg. • Downstream boundary established by the polygon line between 5JR and 6JR, with reference to sample RJ-238+00-N10 6-12" = 3.2 mg/kg. • Floor established by sample RJ-236+50-N10 24-40" = 0.41 mg/kg.
J207	• Upstream and upland boundaries established by samples RJ 541R 0-6" = 2.71 mg/kg; and RJ 516R 0-6" = 3.16 mg/kg. • Downstream boundary established by sample RJ-244+60-E40 6-12" = 4.7 mg/kg; and the polygon lines between 15JRa, 15JRb, 14JR and 13JR, with reference to samples RJ-242+70-E40 6-12" = 0.69 mg/kg; RJ 543R 6-12" = 1.62; and RJ-244+60-E40 6-12" = 4.7 mg/kg. • Boundaries with J208, J208a and J208b established by samples RJ-242+70-E20 6-12" = 3.3 mg/kg; RJ 542R 6-12" = 2.44 mg/kg; and RJ 543R 6-12" = 1.62 mg/kg. • Floor established by samples RJ-242+70-E40 6-12" = 0.69 mg/kg; RJ 542R 6-12" = 2.44 mg/kg; and RJ 543R 6-12" = 1.62 mg/kg.
J207a	• Upstream boundary established by samples RJ 538R 0-6" = 1.85 mg/kg; RJ 538R 6-12" = 2.79 mg/kg; and the polygon line between 6JR, 9JR and 8JR, with reference to the abovementioned samples. • Upland boundary established by samples RJ 537R 6-12" = 4.41 mg/kg; and RJ 511R 6-12" = 0.286 mg/kg. • TSCA boundaries with J207b established by samples RJ B512R 0-6" = 4.58 mg/kg; and RJ B513R 0-6" = 9.05 mg/kg. • Downstream boundary established by feeder stream into the creek. • Boundary with J207d established by the polygon line between 10JR and 11JR, with reference to sample RJ B514R 6-12" = 3.82 mg/kg. • Floor established by 8JR-PRE-12-18 = 0.49 mg/kg.
J207b	• Downstream boundary with J207d established by sample RJ B514R 6-12" = 3.82 mg/kg. • Lateral TSCA boundaries established by samples RJ B512R 0-6" = 4.58 mg/kg; RJ B513R 0-6" = 9.05 mg/kg; and RJ B514R 0-6" = 10.7 mg/kg. • Floor established by 8JR-PRE-12-18 = 0.49 mg/kg.
J207c	• Upstream boundary established by samples RJ 538R 0-6" = 1.85 mg/kg; RJ 538R 6-12" = 2.79 mg/kg; and the polygon line between 6JR and 8JR, with reference to the abovementioned samples. • Upland boundary established by samples RJ 554R 0-6" = 3.1 mg/kg; and RJ 539R 0-6" = 2.68 mg/kg. • Western boundary with J207a established by samples RJ 537R 6-12" = 4.41 mg/kg; and RJ 511R 6-12" = 0.286 mg/kg. • Downstream boundary established by feeder stream into the creek. • Floor established by 8JR-PRE-12-18 = 0.49 mg/kg.

Table 2. Rationale for Removal Boundaries
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Removal Zone ID	Rationale
J207d	• Upland boundary established by the polygon line between 10JR and 11JR, with reference to sample RJ B514R 6-12" = 3.82 mg/kg. • Downstream boundary established by feeder stream into the creek. • Floor established by sample RJ B514R 6-12" = 3.82 mg/kg.
J208	• Lateral TSCA boundaries established by samples RJ B518R 12-18" = 0.979 mg/kg; RJ B518R 18-24" = 0.795 mg/kg; RJ-242+70-E20 6-12" = 3.3 mg/kg; RJ B517R 12-18" = 1.71 mg/kg; and RJ B517R 18-24" = 0.0872 mg/kg. • Floor established by sample RJ B519R 24-30" = 0.103 mg/kg.
J208a	• Upstream boundary established by sample RJ 542R 6-12" = 2.44 mg/kg. • Upland boundary established by sample RJ-242+70-E20 6-12" = 3.3 mg/kg • TSCA boundary with J208 established by samples RJ B517R 12-18" = 1.71 mg/kg; and RJ B517R 18-24" = 0.0872 mg/kg. • Floor established by sample RJ B517R 12-18" = 1.71 mg/kg.
J208b	• TSCA boundary with J208 established by samples RJ B518R 12-18" = 0.979 mg/kg; RJ B518R 18-24" = 0.795 mg/kg. • Upland boundary established by sample RJ-242+70-E20 6-12" = 3.3 mg/kg. • Downstream boundary established by sample RJ 543R 6-12" = 1.62 mg/kg. • Floor established by sample RJ B518R 12-18" = 0.979 mg/kg.
J209	• Lateral TSCA boundaries with J210 established by samples RJ B520R 6-12" = 29.9 mg/kg; RJ B521R 6-12" = 3.4 mg/kg; and RJ B522R 6-12" = 8.33 mg/kg. • Floor established by sample RJ-244+80-E10 12-24" = 1.4 mg/kg.
J210	• TSCA boundaries with J209 established by samples RJ B520R 6-12" = 29.9 mg/kg; RJ B521R 6-12" = 3.4 mg/kg; and RJ B522R 6-12" = 8.33 mg/kg. • Upland boundary established by the polygon line between 15JRb and 15JRc, with reference to sample RJ-244+80-E60 0-6" = 1.4 mg/kg. • Upstream boundary established by sample RJ-244+60-E40 6-12" = 4.7 mg/kg; and the polygon lines between 15JRa, 15JRb, 14JR and 13JR, with reference to samples RJ-242+70-E40 6-12" = 0.69 mg/kg; RJ 543R 6-12" = 1.62; and RJ-244+60-E40 6-12" = 4.7 mg/kg. • Downstream boundary established by sample RJ 545R 6-12" = 4.24 mg/kg; and the polygon line between 15JRb and 16JR, with reference to sample RJ-245+00-E40 6-12" = 0.51 mg/kg. • Floor established by samples RJ-244+80-E40 12-18" = 1.8 mg/kg; and RJ-244+80-E10 12-24" = 1.4 mg/kg.
J211	• Upstream boundary established by sample RJ 545R 6-12" = 4.24 mg/kg; and the polygon line between 15JRb and 16JR, with reference to sample RJ-245+00-E40 6-12" = 0.51 mg/kg. • Downstream boundary established by RJ 523R 0-6" = 3.73 mg/kg. • Floor established by RJ-245+00-E40 6-12" = 0.51 mg/kg.

Table 2. Rationale for Removal Boundaries
Reach J
Hayton Area Remediation Project

05/26/2011

Removal Zone ID	Rationale
J212	• Lateral TSCA boundaries defined by samples RJ-247+50-E20 0-6" = 44 mg/kg; RJ B524R 0-6" = 3.78 mg/kg; and RJ-247+90-E20 0-6" = 39 mg/kg. • Floor established by sample RJ 247+70-E20 6-12" = 0.74 mg/kg.
J213	• Upstream and upland boundaries established by samples RJ 546R 0-6" = 1.81 mg/kg; RJ 546R 6-12" = 1.33 mg/kg; and RJ-247+70-E40 0-6" = 0.74 mg/kg. • Downstream boundary established by sample RJ-247+90-E20 6-12" = 0.35 mg/kg. • TSCA boundary with J212 established by sample RJ B524R 0-6" = 3.78 mg/kg. • Floor established by sample RJ-247+50-E20 12-24" = 0.68 mg/kg; and RJ-247+70-E20 12-24" = 0.06 mg/kg.
J214	• Upstream boundary established by sample RJ-247+90-E20 6-12" = 0.35 mg/kg. • Upland boundary established by the polygon line between 18JRb and 21JR, with reference to sample RJ-247+70-E40 0-6" = 0.74 mg/kg; sample RJ 555R 0-6" = 2.86 mg/kg; and RJ 554R 0-6" = 2.21 mg/kg. • TSCA boundary with J212 established by sample RJ-247+90-E20 0-6" = 39 mg/kg. • Downstream boundary with J215a established by the polygon line between 18JRb and 23JR, with reference to sample RJ-247+90-E20 6-12" = 0.35 mg/kg. • Floor established by sample RJ-247+90-E20 6-12" = 0.35 mg/kg.
J215	• Upstream boundary established by sample RJ 528R 0-6" = 1.71 mg/kg. • Downstream boundary established by sample RJ 529R 0-6" = 2.96 mg/kg. • Upland boundary established by the polygon line between 27JR and 26JR, with reference to sample RJ-249+40-N40 = 0.98 mg/kg. • Floor established by sample RJ-249+40-N10 6-12" = 4 mg/kg.
J215a	• Upstream boundary with J214 established by the polygon line between 18JRb and 23JR, with reference to sample RJ-247+90-E20 6-12" = 0.35 mg/kg. • Upland boundary established by sample RJ 527R 6-12" = 4.3 mg/kg. • Downstream boundary established by a feeder stream into the creek. • Floor established by sample 24JR-PRE-12-18 = <0.10 mg/kg.
J215b	• Upland boundary established by samples RJ 554R 0-6" = 2.21 mg/kg; and RJ 555R 0-6" = 4.9 mg/kg. • Downstream boundary established by a feeder stream into the creek. • Floor established by sample RJ 527R 6-12" = 4.3 mg/kg.

Table 3. Proposed Post-Remedial Verification Samples
Reach J
Hayton Area Remediation Project

05/26/2011

Sample ID	In-channel[1] or Overbank	Type	Northing	Easting
RJ IC PRVF 900C	In-channel	Floor	731964	2471224
RJ IC PRVF 901C	In-channel	Floor	732005	2471032
RJ IC PRVF 902C	In-channel	Floor	731949	2470885
RJ IC PRVF 903C	In-channel	Floor	732148	2470815
RJ IC PRVF 904C	In-channel	Floor	732256	2470614
RJ IC PRVF 905C	In-channel	Floor	732536	2470497
RJ IC PRVF 906C	In-channel	Sidewall	732741	2470486
RJ PRVF 022L 12-18"	Overbank	Floor	731984	2471026
RJ PRVF 023L 6-12"	Overbank	Floor	732108	2470830
RJ PRVF 024L 12-18"	Overbank	Floor	731962	2471025
RJ PRVF 025L 6-12"	Overbank	Floor	732725	2470410
RJ PRVF 559R 6-12"	Overbank	Floor	731984	2471211
RJ PRVF 560R 12-18"	Overbank	Floor	731951	2471120
RJ PRVF 561R 6-12"	Overbank	Floor	732000	2471107
RJ PRVF 562R 12-18"	Overbank	Floor	731993	2471067
RJ PRVF 563R 24-30"	Overbank	Floor	732190	2470677
RJ PRVF 564R 12-18"	Overbank	Floor	732348	2470581
RJ PRVF 565R 6-12"	Overbank	Floor	732590	2470485
RJ PRVF 566R 24-30"	Overbank	Floor	731964	2470985
RJ PRVF 567R 6-12"	Overbank	Floor	732286	2470608
RJ PRVF 568R 6-12"	Overbank	Floor	732660	2470483

[1] The locations of in-channel samples may be adjusted, or additional in-channel samples may be added, based on visual cues observed during removal.

LEGEND

CENTERLINE OF CREEK

SAMPLE LOCATION	
DEPTH IN INCHES	TOTAL PCBs mg/kg

NRT 2005 SOIL SAMPLE LOCATION AND RESULT

RE-125+00-W50 (ET)	0.320

EARTH TECH 2003 SOIL SAMPLE LOCATION AND RESULT

DATA QUALIFIERS:

≥ 50.0	SOIL CONCENTRATIONS THAT ARE EQUAL TO OR GREATER THAN 50.0 mg/kg ARE SHOWN IN RED
≥ 25.0 TO < 50.0	SOIL CONCENTRATIONS THAT ARE GREATER THAN OR EQUAL TO 25.0 BUT LESS THAN 50.0 mg/kg ARE SHOWN IN BLUE
≥ 5.0 TO < 25.0	SOIL CONCENTRATIONS THAT ARE GREATER THAN OR EQUAL TO 5.0 BUT LESS THAN 25.0 mg/kg ARE SHOWN IN GREEN
< 5.0	SOIL CONCENTRATIONS THAT ARE LESS THAN 5.0 mg/kg ARE SHOWN IN BLACK
NA	NOT ANALYZED
Q	ANALYTE DETECTED BELOW THE LIMIT OF QUANTITATION

SOURCE NOTES:
1. THIS DRAWING WAS DEVELOPED FROM A DRAWING IN THE OU2/L & OU3 SAP.
2. ORIGINAL SAMPLE LOCATIONS SURVEYED SEPTEMBER 2005 BY AERO-METRIC, INC. CHILTON, WISCONSIN.
3. STEP-OUT LOCATIONS WERE FIELD MEASURED BY TRC AND NATURAL RESOURCE TECHNOLOGY PERSONNEL DURING OCTOBER AND NOVEMBER 2005. THESE MEASUREMENTS ARE BASED OFF OF THE SURVEYED POINT LOCATIONS.

N

0 50 100

SCALE IN FEET

BEGIN REACH K
END REACH J

BEGIN REACH J
END REACH I

RJ-249+40-N40	
0-6	0.980
6-12	NA
12-18	NA
18-22	NA

RJ-249+40-S100	
0-6	20.000
6-12	4.900
12-24	< 0.034

RJ-249+40-N10	
0-6	15.000
6-12	4.000
12-24	0.170

RJ-249+40-S50	
0-6	19.000
6-12	0.210
12-15	3.400
15-18	NA

RJ-249+00-W10	
0-6	17.000
6-12	37.000
12-21	5.800
21-24	0.037 Q

RJ-247+90-E20	
0-6	39.000
6-12	0.350
12-24	< 0.045
24-36	NA

RJ-247+70-E60	
0-6	0.390
6-12	NA
12-18	NA
18-27	NA

RJ-249+40-S80	
0-6	6.600
6-12	3.300
12-18	NA
18-29	NA

RJ-247+70-E40	
0-6	0.740
6-12	NA
12-18	NA
18-27	NA

RJ-247+70-E20	
0-6	74.000
6-12	0.740
12-24	0.060 Q
24-27	NA

RJ-247+50-E20	
0-6	44.000
6-12	8.100
12-24	0.680
24-36	NA
36-48	NA

RJ-246+00-E100	
0-6	4.700
6-12	2.200
12-24	NA

RJ-246+20-S10	
0-6	19.000
6-12	36.000
12-21	23.000
21-27	< 0.037

RJ-245+00-E40	
0-6	31.000
6-12	0.510
12-24	< 0.040
24-36	NA

RJ-246+20-S50	
0-6	26.000
6-12	3.800
12-24	0.084 Q

RJ-246+20-S80	
0-6	12.000
6-12	0.077 Q
12-18	NA
18-29	NA

RJ-244+80-E60	
0-6	1.400
6-12	NA
12-24	NA
24-36	NA

RJ-245+50-W75	
0-6	0.610
6-12	NA
12-24	NA

RJ-244+80-W10	
0-6	1.900

RJ-244+80-E40	
0-6	9.900
6-12	9.400
12-18	1.800
18-27	NA

RJ-244+80-E10	
0-6	18.000
6-12	53.000
12-24	1.400
24-30	NA

RJ-244+60-E40	
0-6	9.700
6-12	4.700
12-24	NA
30-42	NA

RJ-242+70-E40	
0-6	9.000
6-12	0.690
12-24	NA
24-34	NA

RJ-242+70-E20	
0-6	5.100
6-12	3.300
12-16	NA
16-28	NA

RJ-242+70-E10	
0-6	4.400
6-12	23.000
12-24	54.000

RJ-242+70-W10	
0-6	0.048 Q
6-12	NA

RJ-241+20-S10	
0-6	17.000
6-12	2.000
12-24	0.120 Q

RJ-241+20-S40	
0-6	1.900
6-12	NA
12-18	NA
18-24	NA

RJ-240+00-W20	
0-6	20.000
6-12	0.700
12-24	0.100 Q

RJ-240+00-W80	
0-6	0.046 Q
6-12	NA
12-24	NA

RJ-238+00-N25	
0-6	2.400

RJ-238+00-N10	
0-6	14.000
6-12	3.200
12-32	NA
32-36	NA

RJ-238+00-S25	
0-6	0.650
6-12	NA
12-27	NA

RJ-236+50-N80	
0-6	54.000
6-12	2.500
12-24	0.590
24-36	NA

RJ-236+50-N60	
0-6	100.000
6-12	0.960
12-24	2.000
24-33	NA

RJ-236+70-N60	
0-6	120.000
6-12	1.800
12-24	0.270
24-36	NA

RJ-236+50-N30	
0-6	25.000
6-12	32.000
12-24	0.650
24-30	NA

RJ-236+50-N10	
0-6	13.000
6-12	32.000
12-24	34.000
24-40	0.410

RJ-235+60-S10	
0-6	21.000
6-12	94.000
12-24	0.400
24-39	NA

RJ-235+60-S30	
0-6	63.000
6-12	28.000
12-21	0.440

RJ-235+60-S50	
0-6	0.570
6-12	NA
12-15	NA
15-24	NA

RJ-235+40-N10	
0-6	59.000
6-12	59.000
12-24	0.810
24-36	NA
36-48	NA

RJ-234+40-N40	
0-6	97.000
6-12	2.100
12-24	3.900
24-31	NA

RJ-234+40-N10	
0-6	21.000
6-12	84.000
12-27	3.700

RJ-234+40-N60	
0-6	62.000
6-12	0.880
12-24	0.140 Q
24-36	NA

RJ-233+00-N30	
0-6	220.000
6-12	1.600
12-24	0.540
24-36	NA

RJ-233+00-N10	
0-6	29.000
6-12	160.000
12-18	2.700
18-24	NA

RJ-234+50-S10	
0-6	1.200
6-12	0.200
12-20	NA
20-30	NA

RJ-234+70-S40	
0-6	17.000
6-12	1.600
12-27	0.160 Q
27-33	NA

RJ-234+70-S70	
0-6	0.660
6-12	NA
12-24	NA
24-33	NA

RJ-233+00-S60	
0-6	12.000
6-12	0.410
12-21	NA
21-27	NA

RJ-233+00-S10	
0-6	40.000
6-12	10.000
12-27	0.970

RJ-233+00-S20	
0-6	23.000
6-12	2.000
12-18	0.300
18-29	NA

RJ-233+00-S80	
0-6	17.000
6-12	0.220
12-18	NA
18-27	NA

RJ-237+00-S100	
0-6	0.570
6-12	NA
12-24	NA

RJ-233+00-S100	
0-6	33.000
6-12	0.560
12-24	0.045 Q
24-36	NA

REACH J

HAYTON AREA REMEDIATION PROJECT
OVERBANK SAMPLE LOCATIONS
AND TOTAL PCB CONCENTRATIONS

NATURAL RESOURCE TECHNOLOGY

PROJECT NO. 1778/1.6

FIGURE NO. 29

DRAWN BY:	RLH/TAS	DATE:	01/18/06
CHECKED BY:	EPK	DATE:	02/07/06
APPROVED BY:	EPK	DATE:	02/15/06

DRAWING NO:1778-16-B03C, LAYOUT J
REF: P:\1778\CAD1778\060111SOILcad_final

2470800 E
2470900 E
2471000 E
2471100 E
2471200 E
2471300 E
2471400 E
2471500 E
2471600 E
2471700 E

732700 N
732600 N
732500 N
732400 N
732300 N
732200 N
732100 N
732000 N
731900 N
731800 N

2470400 E
2470500 E
2470600 E

N

BEGIN REACH K
END REACH J

BEGIN REACH J
END REACH I

FIELD INSPECT

LEGEND

- CENTERLINE OF CREEK
- F2 — SOFT SEDIMENT EXCAVATION AREA
- 0–10" (>6") — AVERAGE SOFT SEDIMENT DEPTH INTERVAL OF EXCAVATION; MINIMUM DEPTH OF EXCAVATION TO 1 PPM PCBs. (FROM SAMPLE POINT)
- PREVIOUS INVESTIGATION SAMPLE (REFER TO ACCOMPANYING FIGURE)
- FLOOR SAMPLE LOCATION
- WALL SAMPLE LOCATION
- TSCA BOUNDARY SAMPLE
- EXCAVATION BOUNDARY ALONG CREEK BANK
- 5 PPM EXCAVATION BOUNDARY
- SUBDIVIDER LINE FOR NON-TSCA EXCAVATION DEPTH INTERVALS
- 50 PPM EXCAVATION BOUNDARY (TSCA)
- SUBDIVIDER LINE FOR TSCA EXCAVATION DEPTH INTERVALS

NOTES:
1. COORDINATE SYSTEM IS NAD83, WISCONSIN STATE PLANE, SOUTH ZONE, US FT.

0 25 50 100
SCALE IN FEET

SAMPLE RESULTS AND EXCAVATION BOUNDARIES REACH J

HAYTON AREA REMEDIATION PROJECT

DRAWN BY:	SPA	DATE:	05/26/2011
PROJECT NO:	107927	DWG FILE:	Reach J Presentation

TRC
230 WEST MONROE STREET
SUITE 2370
CHICAGO, IL 60606
312-578-0870

FIGURE 1

RJ IC PRVF 906C

SEE NOTE 1

RJ BK PRVW 510R

RJ PRVF 568R 6-12"

RJ PRVF 025L 6-12"

BEGIN REACH K
END REACH J

RJ BK PRVW 012L

RJ PRVF 565R 6-12"

RJ BK PRVW 509R

RJ IC PRVF 905C

RJ PRVF 564R 12-18"

RJ BK PRVW 508R

RJ PRVF 567R 6-12"

RJ BK PRVW 507R

RJ BK PRVW 011L

RJ PRVF 563R 24-30"

RJ BK PRVW 506R

RJ IC PRVF 904C

RJ BK PRVW 010L

RJ BK PRVW 505R

RJ BK PRVW 009L

RJ IC PRVF 903C

RJ BK PRVW 008L

RJ PRVF 023L 6-12"

RJ BK PRVW 007L

RJ BK PRVW 504R

RJ BK PRVW 006L

RJ IC PRVF 902C

RJ PRVF 556R 24-30"

RJ BK PRVW 004L

RJ BK PRVW 005L

RJ PRVF 022L 12-18"

RJ PRVF 024L 12-18"

RJ PRVW 503R

RJ PRVF 561R 6-12"

RJ BK PRVW 501R

RJ PRVF 559R 6-12"

RJ BK PRVW 500R

RJ PRVF 562R 12-18"

RJ IC PRVF 901C

BEGIN REACH J
END REACH I

FIELD INSPECT

RJ BK PRVW 502R

RJ BK PRVW 003L

RJ PRVF 560R 12-18"

RJ BK PRVW 001L

RJ BK PRVW 002L

RJ IC PRVF 900C

N

0 50 100 200

SCALE IN FEET
1" = 100'

S:\Cad Files\Year 2010 Drawings\107927 - TECUMSEH\2011 Sampling and excavation boundary maps\Presentation Figures\Reach J Presentation (2011_07_06)(11x17).dwg

NO.	DATE	COMMENT
-	6/24/2011	ADDED PROPOSED BANK SAMPLES
-	7/07/2011	MODIFIED PROPOSED BANK SAMPLES

REVISIONS

230 WEST MONROE STREET,
SUITE 2700
CHICAGO, IL 60606
PHONE (312) 578-0870
FAX (312) 578-0877

TRC

PROPOSED POST-REMEDIAL
VERIFICATION SAMPLES
REACH J

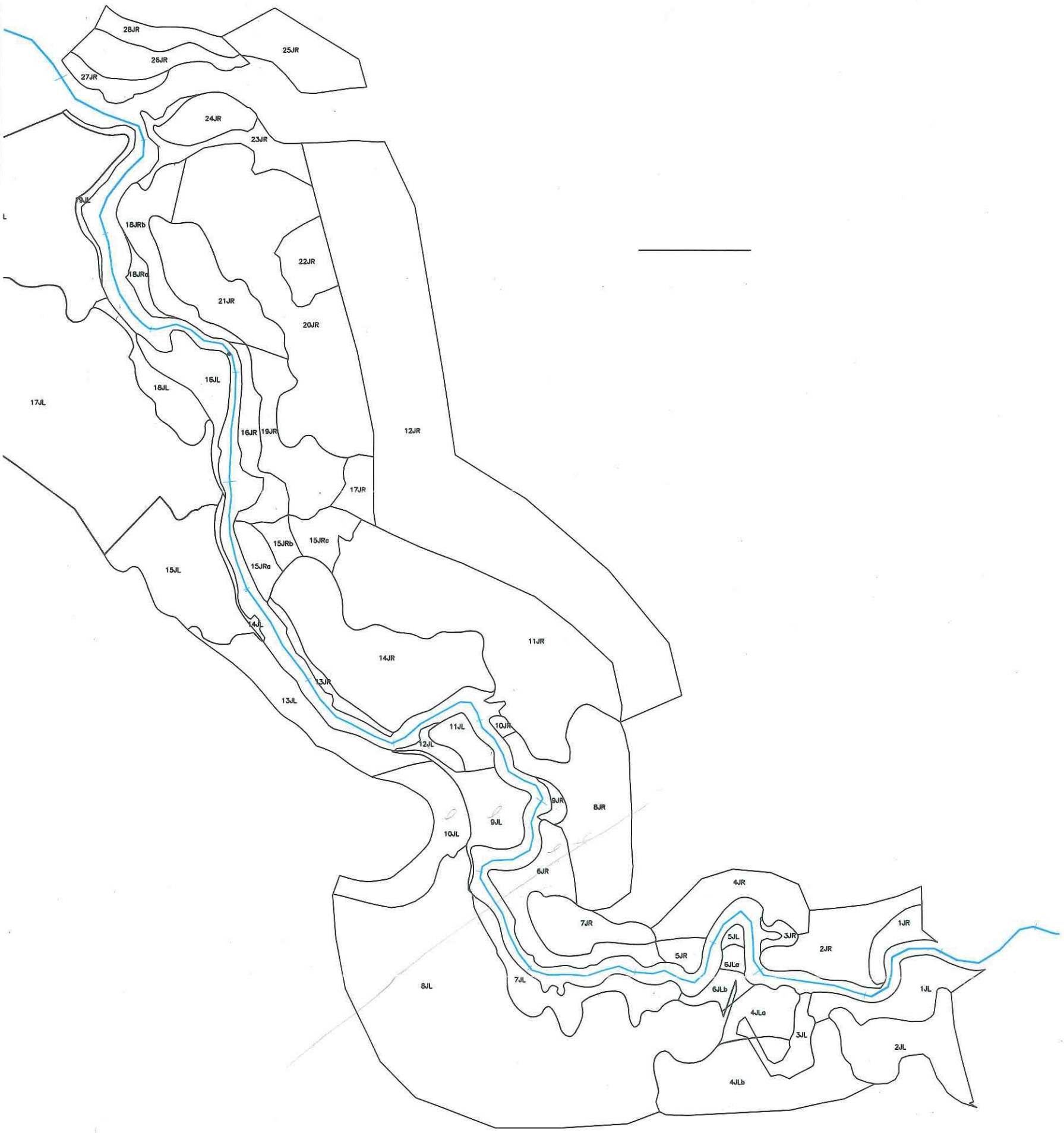
HAYTON AREA REMEDIATION PROJECT
CALUMET COUNTY, WISCONSIN

SCALE:	1" = 100'
DRAWN BY:	SPA
JOB NUMBER:	107927
SHEET NO.	2 of 2
SHEET ID:	REACH J PRESENTATION (2011_07_08)(11X17).DWG
DATE:	JULY 07, 2011
DESIGN BY:	PD

FIGURE NO. 2

Polygon Map - Reach J

CENTERLINE OF CREEK



NATURAL RESOURCE TECHNOLOGY	OVERBANK EXCAVATION LIMITS REACH J HAYTON AREA REMEDIATION PROJECT OU2 LOWER/OU3 SCOPE OF WORK	DRAWN BY: RLH	DATE: 11/20/06
		CHECKED BY: JAZ	DATE: 11/21/06
		APPROVED BY: JAZ	DATE: 11/28/06
		DRAWING NO:1778-23-B08C-02, LAYOUT J REF: FIGURE 13B REVISION 2	
PROJECT NO. 1778/2.3			
FIGURE NO. 13B			